Improvement of energy efficiency of buildings

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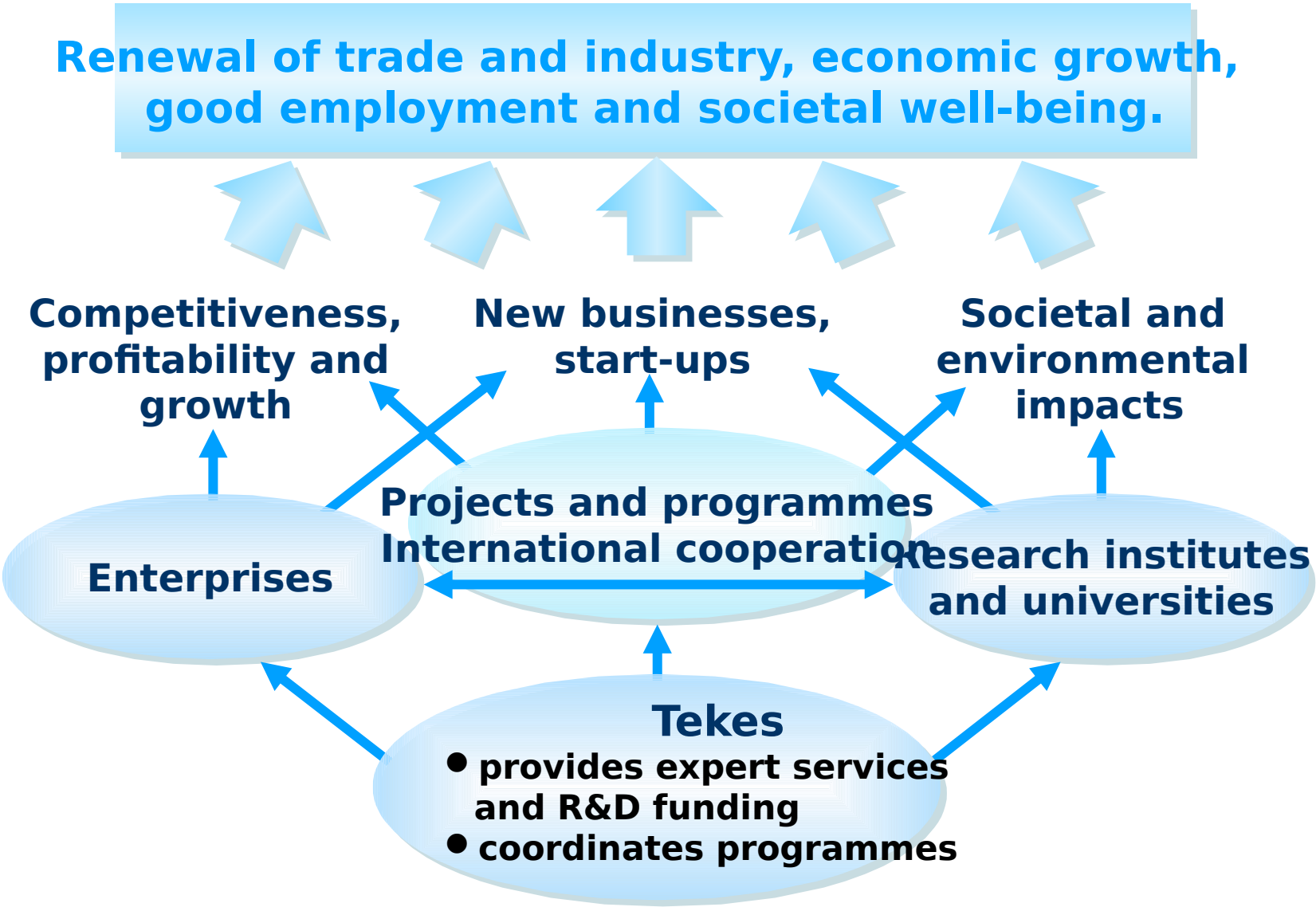
Impact of Tekes activities



SARA

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Actions

Management and leadership
Activation of innovation
Client-specific, regional and sector-specific activation
Promoting technology transfers
Special action for new companies
Promotion of internationalisation
Technology programmes
Identification of future programmes
Preparation of technology programmes
Implementation of technology programmes
Selective project funding
Project planning support and selection of projects
Monitoring and support for funded projects
Development of funding services and principles
Internal services

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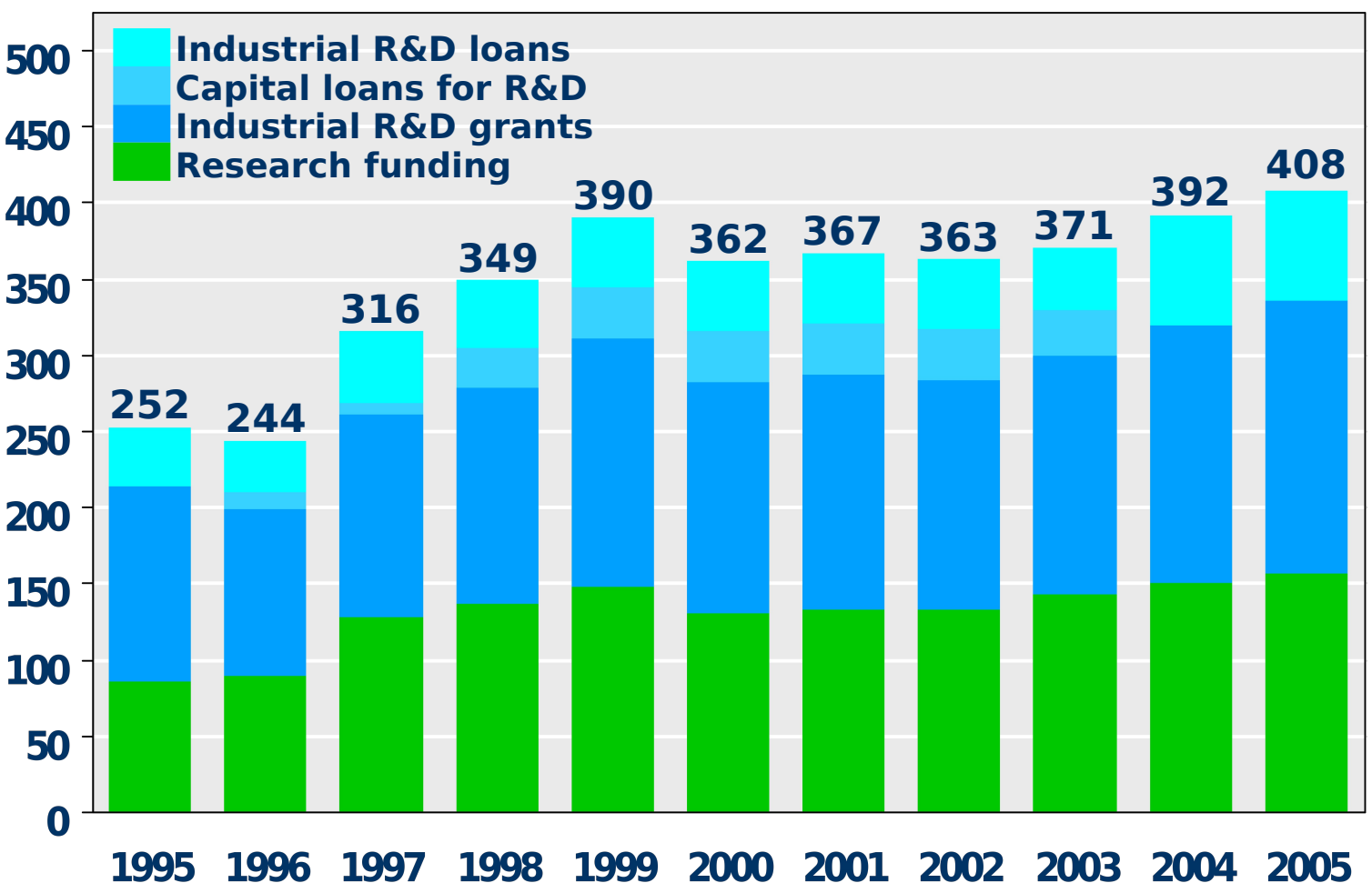
Tekes R&D funding resources in the state budget



During the years 2000-2005 Tekes also had an annual allocation of 10-15 million euros for programme coordination and 11-20 million euros from the EU Structural Funds.
The funding resources for industrial R&D loans and capital loans for R&D merged in 2004

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Competitiveness 2002-2005

Total ranking

	WEF Growth competitiveness 2004	WEF Growth competitiveness 2003*	WEF Growth competitiveness 2002	WEF Business competitiveness 2004	IMD Total competitiveness 2005
Finland	1	1	2	2	6
USA	2	2	1	1	1
Sweden	3	3	5	4	14
Taiwan	4	5	3	17	11
Denmark	5	4	10	7	7
Norway	6	9	9	20	15
Singapore	7	6	4	10	3
Switzerland	8	7	6	5	8
Japan	9	11	13	8	21
Iceland	10	8	12	19	4
Great Britain	11	15	11	6	22
Netherlands	12	12	15	9	13
Germany	13	13	14	3	23
Australia	14	10	7	13	9

* Applying 2003 formula

Sources: IMD, The World Competitiveness Yearbook 2005 and WEF, The Global Competitiveness Report 2004-2005

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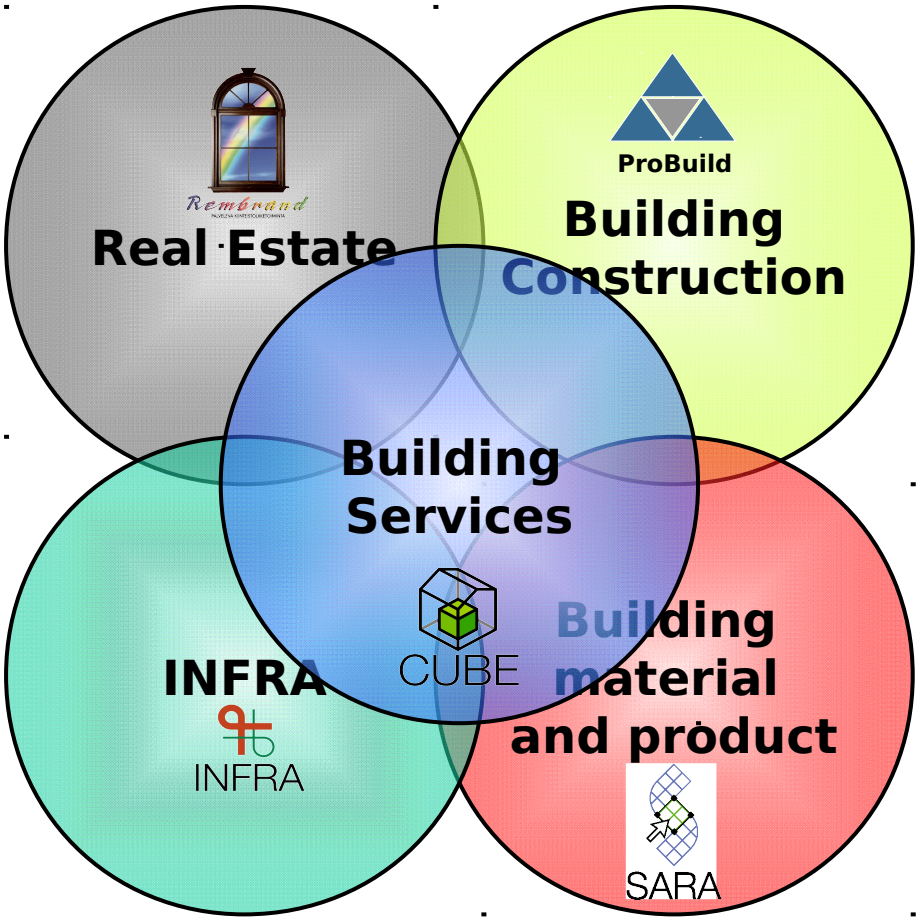
Real Estate and Construction Cluster



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Change

From investment cost to life cycle profit

Product ⇨ System ⇨ Service

ICT based competitiveness

RECC driver of the society

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SARA - Value Networks in Construction

The programme is focusing on building construction and strengthening cooperation in the real estate and construction cluster.

- **Programme duration: 1.4.2003 - 30.6.2008**
- **Programme volume: 33 million euros**
  - **of which Tekes finances 14.7 million euros**
- **Programme manager: Jarmo Manninen, Rakennusteollisuus RT ry**
- **Further information: www.tekes.fi/english/programmes/sara**

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CUBE - Building Services

The CUBE programme connects the resources of environmen conscious building services, develops ICT-based user-interfa creates space-oriented added value for building owners and and produces energy-efficient system solutions

- **Programme duration: 2002-2006**
- **Programme volume: 35-40 million euros**
- **Programme Manager: Markku J. Virtanen, Development Centre for Finnish Building Services**
- **Further information: www.tekes.fi/english/programmes/cube**

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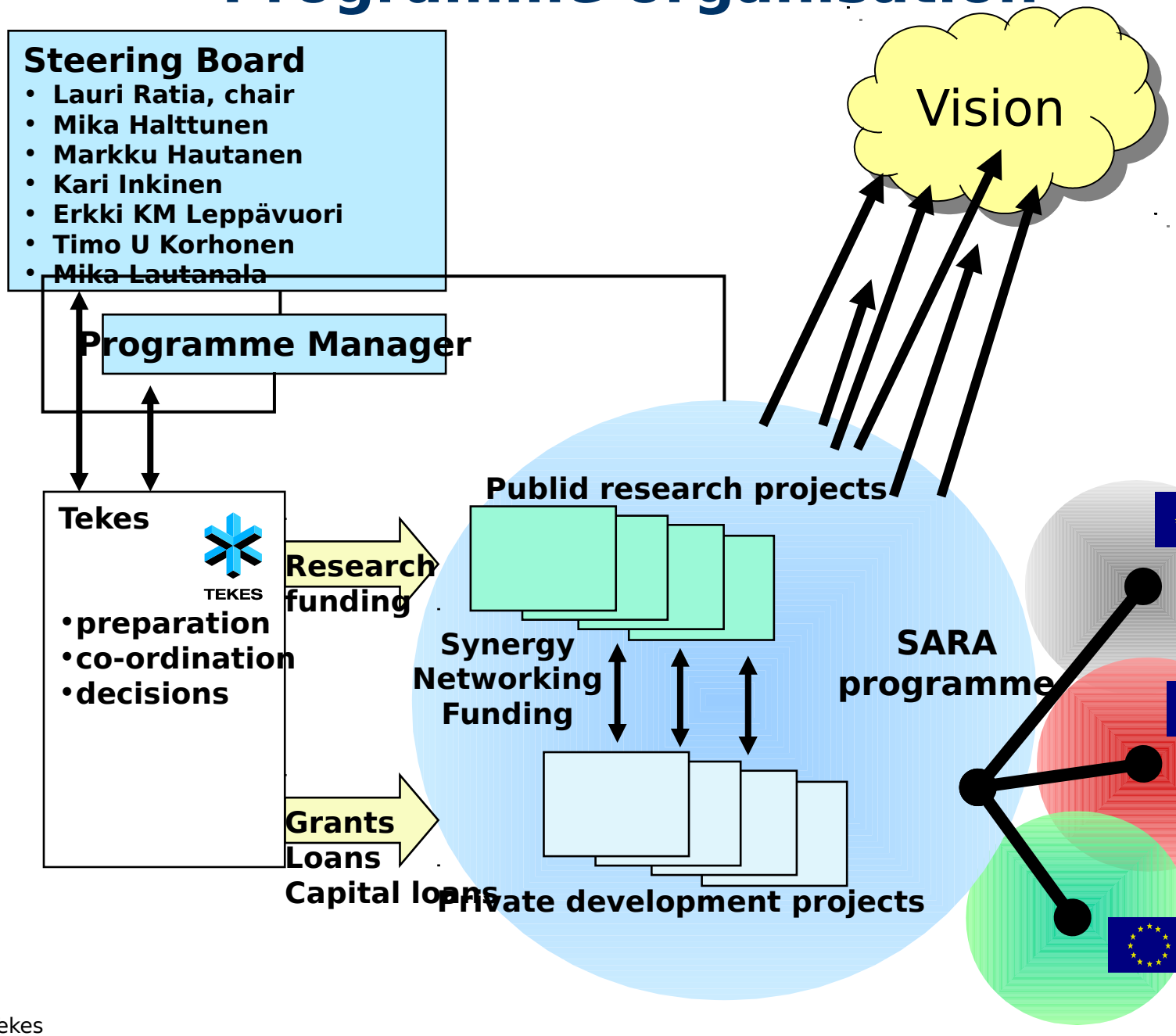
Programme organisation



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ERABUILD

Strategic cooperation between national programmes promoting sustainable construction and operation of buildings

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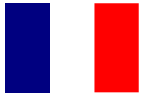
EBST - National Agency for Enterprise and Construction
"Digital Construction"

DTI - Department of Trade and Industry
"Avanti"



1. **Ministère de l'équipement, des transports, du logement, du tourisme et de la mer**
2. **CSTB - Centre Scientifique et Technique du Batiment**
   "Sustainable Building"

SenterNovem - Netherlands Agency for Energy and The Environment
Sustainability and

Tekes – National Technology Agency, coordinator
"Sara" & "Cube"

1. **BMBF - German Federal Ministry of Education and Research**
2. **TÜV - Akademie Rheinland GmbH**
   "Building and Housing"

1. **Formas - The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning**
2. **BIC - Swedish Construction Sector Innovation Centre**
   "Sustainable Buildings"

1. **BMVIT - Austrian Federal Ministry of Transport, Innovation and Technology**
2. **FFF - Austrian Industrial Research Promotion**
3. **Ögut - Austrian Society for Environment and Technology**
   "Building of tomorrow"

ECTP

- **ECTP is an initiative to mobilise the construction sector, to be changed through R&D&I, in order to satisfy the needs of the society**

- **A industrial driven platform with the industrial commitment and the contribution of all the stakeholders, in order to reach the 3% GDP on research (1/3 public; 2/3 industry)**

Stages and Deliverables

Stage 1: getting together

- Terms of Reference
- Vision 2030

Stage 2: define Strategic Research Agenda

- Inputs to FP7 drafts
- SRA

Stage 3: implement the SRA

- Open calls

Conclusion

- Real Estate and Construction sector is a major driver of the society
  - economically
  - socially
  - environmentally
- RECC faces huge challenges
  - some of them are unique in different countries
  - many of them are common in all countries
- We need to join our resources to solve them

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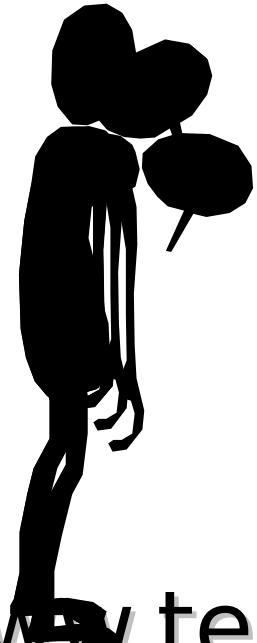

Thank You!

www.tekes.fi/english/programmes/cube/

www.tekes.fi/english/programmes/sara/

www.erabuild.net

www.ectp.org

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